STN-Structure Seaseh 8.19.04

=> d ibib abs hitstr 1-4

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:276738 CAPLUS

DOCUMENT NUMBER:

138:287671

TITLE:

Preparation of aminoimidazopyridinylalkyl(thio)ureas

as cytokine biosynthesis inducers.

INVENTOR(S):

Dellaria, Joseph F.; Haraldson, Chad A.; Heppner,

Philip D.; Lindstrom, Kyle J.; Merrill, Bryon A.

PATENT ASSIGNEE(S):

3M Innovative Properties Company, USA

SOURCE:

U.S., 40 pp., Cont.-in-part of U.S. Ser. No. 16,073.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	ATENT	NO.			KIN	D	DATE			APPL:	ICAT	ION	NO.		D	ATE	
បះ	5 6545	017			B1	_	2003	0408		US 2	002-	1654	53		2	0020	607
U:	3 2002	1072	62		A1		2002	8080		US 2	001-	1607	3		2	0011	206
W	2003	0501	17		A1		2003	0619		WO 2	002-	US18	220		2	0020	607
	W:	ΑE,	AG,	AL,	AM,	AT,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EE,	EE,	ES,
		FI,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,
										LU,							
										RO,							
										ŪĠ,							
				BY,		•	•	•	•	•	•	•	•	•	•	•	•
	RW:		•	•		MW,	MZ.	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
										IE,				-	-		
										GQ,							•
WO	2003			•	A1		2003			WO 2				•		0020	
	W:			AL,	AM,					BB,				BZ,			
										EC,							
										ΚE,							
										MN,							
		•	-	-		-		•		SK,	-	-					•
										ZW,							
		TJ,	-	•	•	•	•			•	•	•	•	•	•		•
	RW:			KE.	LS.	MW.	MZ.	SD,	SL.	SZ,	TZ,	UG,	ZM.	ZW,	AT,	BE.	CH,
										IE,							
										GQ,							
WC	2003			,	A2		2003			WO 2				,		0020	
	2003				A.3		2003										
	W:			AL,	AM.				AZ.	BA,	BB,	BG,	BR.	BY,	BZ,	CA.	CH.
										DK,							
			-							HU,			•	•	•	•,	•
										LU,							
										RO,							
										UG,							•
				BY,		•	•	•	•	•	•	•	•	•	•	•	•
	RW:	-				MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
										ΙE,							
										GQ,						-	
US	3 2003			•	A1		2003			US 20				•		0030	
US	6720	334			В2		2004	0413									
US	3 2003	1952	09		A1		2003			US 20	003-	3577	77		20	0030	204
	6716				В2		2004								_		
	2004		79		A1		2004			US 20	004-	7716	39		20	0040	204
PRIORIT				. :	-					US 20]		0001	

RN 507262-43-3 CAPLUS

CN Urea, N-[2-(4-amino-2,6,7-trimethyl-1H-imidazo[4,5-c]pyridin-1-yl)ethyl]-N'-(4-phenoxyphenyl)- (9CI) (CA INDEX NAME)

RN 507262-45-5 CAPLUS

CN Urea, N-[2-(4-amino-2,6,7-trimethyl-1H-imidazo[4,5-c]pyridin-1-yl)ethyl]-N'-[(1R,2S)-2-phenylcyclopropyl]-, rel-(9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 507262-88-6 CAPLUS

CN Urea, N-[2-[4-amino-2-(ethoxymethyl)-6,7-dimethyl-1H-imidazo[4,5-c]pyridin-1-yl]-1,1-dimethylethyl]-N'-phenyl- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:276737 CAPLUS

DOCUMENT NUMBER:

138:304283

TITLE:

Preparation of aminoimidazopyridinylalkylamides as

inducers of cytokine biosynthesis.

INVENTOR(S):

Dellaria, Joseph F.; Haraldson, Chad A.; Heppner,

Philip D.; Lindstrom, Kyle J.; Merrill, Bryon A.

PATENT ASSIGNEE(S):

3M Innovative Properties Company, USA

SOURCE:

U.S., 37 pp., Cont.-in-part of U.S. Ser. No. 16,073,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: LANGUAGE:

GΙ

Patent English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PA'	TENT 1	NO.			KIN		DATE			APPL	ICAT	ION :			D.	ATE	
US	6545	016			В1		2003	0408		US 2	002-	1652	29		2	0020	607
	2002		62		A1		2002			US 2						0011	
	2003				A1		2003			WO 2						0020	
WO	W:			Δ .Τ.		ZΔT	AT,							RV			
	VV .																ES,
							CZ,										•
		•	•	•	•		GH,	•	•	•		•	•		•	•	KG,
		KP,					LR,									MN,	MW,
							PH,										
		SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪG,	US,	UZ,	VN,	ΥU,	ZA,	ZM,	ZW,
		AM,	•	BY,													
	RW:	GH,	GM,	KE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	ŪG,	ZM,	ZW,	ΑT,	BE,	CH,
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU,	MC,	ΝL,	PT,	SE,	TR,
		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG
WO	2003	0501	18		A1		2003	0619		WO 2	002-	US18	282		2	0020	607
	w:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
							IN,									LK,	LR,
		LS,					MD,									OM,	PH,
		PL,					SE,	•		•	-		•			TT,	TZ,
		UA,					YU,			•			•	•			•
		TJ,	TM	,	,	,	,	,	,	,	,	,	,	,	,	,	,
	RW:	GH,		KE.	LS,	MW.	MZ,	SD,	SL,	SZ.	TZ,	UG,	ZM,	ZW,	AT,	BE,	CH,
		CY,					FR,										•
							CM,										
WO	2003			•	A2		2003			WO 2						0020	
	2003				A3		2003								_		
	W:			AI.			AT,		A7.	BA.	BB.	BG.	BR.	BY.	B7.	CA.	CH,
							CZ,										
		FI,					GH,										KG,
		•	•	•	•		LR,			•		•	•	•	•	•	•
							PH,										SK,
		SL,					TT,										•
		•	•			11,	11,	14,	UA,	og,	US,	04,	VIV,	10,	ΔA,	Z141,	ZW,
	D57 -	•	•	BY,		3.65.7	3.60	a D	ат	C F	m.63	шс	734	P 5-7	3 m	DE	CII
	RW:	GH,			-		MZ,	-	-						•		•
							FR,										•
	0000			CF,		CI,	CM,							NE,			
	2003		06		A1		2003			US 2	003-	3579	95		2	0030	204
	6720				B2		2004			_					_		
	2003		49		A1		2003			US 2	003-	3577	33		2	0030	204
	6720				В2		2004	0413									
ORIT	Y APP	LN.	INFO	.:						US 2						0001	
											001-				B2 2		
										US 2	002-	1652	29	i	A1 2	0020	607
ER S	OURCE	(S):			MAR:	PAT	138:	30428	33								

AB Title compds. [I; X = alkylene, alkenylene; Y = CO, CS; Z = bond, O, S; R1 = (substituted) aryl, heteroaryl, heterocyclyl; R2 = H, alkoxyalkyl, aryloxyalkyl, (substituted) aryl, heteroaryl, alkyl, alkenyl, etc.; R3, R4 = H, alkyl, alkenyl, halo, alkoxy, amino, alkylthio; R5 = H, alkyl; R5X, R1R5 = atoms to form a ring], were prepared Thus, Et3N and 1-(4-aminobutyl)-2-butyl-6,7-dimethyl-1H-imidazo[4,5-c]pyridin-4-amine (preparation given) in CH2Cl2 were treated with methanesulfonic anhydride under ice cooling followed by stirring for 35 min. to give N-[4-(4-amino-2-butyl-6,7-dimethyl-1H-imidazo[4,5-c]pyridin-1-yl)butyl]methanesulfonamide. The latter induced interferon and tumor necrosis factor production in human peripheral blood mononuclear cells at lowest effective concns. of 0.0046 and 0.01 μM, resp.

IT 437384-44-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aminoimidazopyridinylalkylamides as inducers of cytokine biosynthesis)

RN 437384-44-6 CAPLUS

CN Urea, N-[4-(4-amino-2-butyl-6,7-dimethyl-1H-imidazo[4,5-c]pyridin-1-yl)butyl]-N'-phenyl- (9CI) (CA INDEX NAME)

$$NH2$$
 $NH2$
 $NH3$
 $NH4$
 $NH4$

REFERENCE COUNT:

THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:

2003:150533 CAPLUS

DOCUMENT NUMBER:

INVENTOR(S):

138:187770

TITLE:

Preparation of sulfonamido/benzamido-alkyl substituted

imidazopyridines as immune response modifiers Dellaria, Joseph F.; Haraldson, Chad A.; Heppner,

Philip D.; Lindstrom, Kyle J.; Merrill, Bryon A.

PATENT ASSIGNEE(S):

3M Innovative Properties Company, USA

SOURCE:

U.S., 35 pp., Cont.-in-part of U.S. Ser. No. 16,073,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT	NO.	KIND	DATE	AP		ON NO.		DATE	
	5064 2107262 3050117	B1 A1 A1	20030225 20020808 20030619	US	2002-1 2001-1	L65002	-	20020 20011 20020	.206
W:	AE, AG, A	L, AM, A	r, AT, AU,	AZ, B	A, BB,	BG, BR,	BY,		
			Z, CZ, DE,						
	FI, FI, G	B, GD, G	E, GH, GM,	HR, H	J, ID,	IL, IN,	IS,	JP, KE,	KG,
	KP, KR, F	Z, LC, L	K, LR, LS,	LT, LU	J, LV,	MA, MD,	MG,	MK, MN,	MW,
	MX, MZ, N	O, NZ, OI	M, PH, PL,	PT, RO	, RU,	SD, SE,	SG,	SI, SK,	SK,
	SL, TJ, T	M, TN, TI	R, TT, TZ,	UA, U	J, US,	UZ, VN,	YU,	ZA, ZM,	
	AM, AZ, E						•		•
RW	: GH, GM, k	E, LS, M	W, MZ, SD,	SL, S	Z, TZ,	UG, ZM,	ZW,	AT, BE,	CH,
			I, FR, GB,						
			I, CM, GA,						
WO 200	3050118	A1	20030619			JS18282	·	20020	
₩:	AE, AG, A	L, AM, A	r, AU, AZ,	BA, BI	B, BG,	BR, BY,	BZ,	CA, CH,	CN,
			E, DK, DM,						
			L, IN, IS,						LR,
	LS, LT, I	U, LV, M	A, MD, MG,	MK, MM	I, MW,	MX, MZ,	NO, 1	NZ, OM,	
	PL, PT, F	O, RU, SI), SE, SG,	SI, SH	K, SL,	TJ, TM,	TN,	TR, TT,	TZ,
,		S, UZ, VI	I, YU, ZA,	ZM, ZV	I, AM,	AZ, BY,	KG,	KZ, MD,	RU,
	TJ, TM								
RW	: GH, GM, K	E, LS, M	N, MZ, SD,	SL, SZ	, TZ,	UG, ZM,	ZW, Z	AT, BE,	CH,
	CY, DE, D	K, ES, FI	FR, GB,	GR, I	E, IT,	LU, MC,	NL,	PT, SE,	TR,
	BF, BJ, C		C, CM, GA,				NE,	SN, TD,	TG
	3050119	A2	20030619	WO	2002-U	S18284		20020	607
	3050119	A3	20030710						
W:	AE, AG, A	L, AM, A'I	AT, AU,	AZ, BA	, BB,	BG, BR,	BY, I	BZ, CA,	CH,
	CN, CO, C	R, CU, CZ	CZ, DE,	DE, DE	, DK,	DM, DZ,	EC, I	EE, EE,	ES,
	£1, £1, G	B, GD, GE	E, GH, GM,	HR, HU	, ID,	IL, IN,	IS,	JP, KE,	KG,
	KP, KR, K	Z, LC, LF	K, LR, LS,	LT, LU	, LV,	MA, MD,	MG, 1	MK, MN,	MW,
	MA, MA, N	O, NZ, ON	1, PH, PL,	PT, RC	, RU,	SD, SE,	SG,	SI, SK,	SK,
			R, TT, TZ,	UA, UG	, US,	UZ, VN,	YU, 2	۷A, ZM,	ZW,
DW	AM, AZ, B GH, GM, K		, M7 CD	CT CO	m <i>r</i>	110 516			
1/44	. פוז, פוז, ה כע הב ה	с, до, ми с се ст	MZ, SD,	SL, SZ	, TZ,	UG, ZM,	ZW, A	AT, BE,	CH,
	CI, DE, D	r, es, el	FR, GB,	GR, IE	, II,	LU, MC,	NL, I	PT, SE,	TR,
115 200	1019076	A1	, CM, GA,				NE,		
US 669		B2	20040129 20040224	0.5	2002-3	22262		20021	217
	1147533	A1	20040224	IIC	2004 7	EADEC		20040	107
PRIORITY API		AI	20040723		2004-7			20040	
INIONIII MI	DIV. TIVEO				2000-2	54228P	P		
								2 20011	
					2002-1 2002-3			1 20020 1 20021:	
OTHER SOURCE	E(S):	MARPAT	138:1877		2002-3	222UZ	A	1 20021.	Z I /
GI	• • •			. 5					

$$R^{3}$$
 N^{1}
 N^{1}
 N^{1}
 N^{1}
 N^{2}
 N^{2

AB Title compds. I [X = alk(en)ylene; Y = SO2; Z = bond, amino; R1 = aryl, heteroaryl, alkyl, heterocyclyl, etc.; R2 = H, alkyl, alkenyl, aryl, etc.; R3-4 = H, alkyl, alkenyl, halo, alkoxy, etc.; R5 = H, alkyl, etc.] are prepared For instance, 4-hydroxy-5,6-dimethyl-3-nitro-2(1H)-pyridone was reacted with triflic anhdydride and mono-boc-1,4-butanediamine to give 4-[[4-[(tert-butoxycarbonyl)amino]butyl]amino]-5,6-dimethyl-3-nitropyridin-2-yl trifluoromethanesulfonate. This intermediate was reacted with dibenzylamine (PhMe, Et3N), reduced to the amino derivative (MeOH, NaBH4, NiCl2), acylated/cyclized (CH3CN, valeryl chloride, Et3N), deprotected (CH2Cl2, triflic acid) and acylated (CH2Cl2, PhCOCl) to give II. II caused interferon induction at 0.12 μM and TNF induction at 1.11 μM. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

IT 437384-44-6P, N-[4-(4-Amino-2-butyl-6,7-dimethyl-1H-imidazo[4,5-c]pyridin-1-yl)butyl]-N'-phenylurea
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of sulfonamido/benzamido-alkyl substituted imidazopyridines as immune response modifiers)

RN 437384-44-6 CAPLUS

CN Urea, N-[4-(4-amino-2-butyl-6,7-dimethyl-1H-imidazo[4,5-c]pyridin-1-yl)butyl]-N'-phenyl- (9CI) (CA INDEX NAME)

$$Me$$
 $NH2$
 $NH2$

REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:449685 CAPLUS

DOCUMENT NUMBER: 137:33300

TITLE: Preparation of substituted imidazopyridines as immune

response modifiers

INVENTOR(S): Lindstrom, Kyle J.

PATENT ASSIGNEE(S): 3M Innovative Properties Company, USA

SOURCE: PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT	NO.	KIND	DATE		ICATION			D.	ATE	
	046194 046194			WO 2				2	0011	 206
	AE, AG, AL CN, CO, CR FI, FI, GB KP, KR, KZ MX, MZ, NO SL, TJ, TM BY, KG, KZ GH, GM, KE CY, DE, DK	, CU, CZ, GD, GE, LC, LK, NZ, OM, TR, TT, MD, LS, MW, ES, FI	, CZ, DE, , GH, GM, , LR, LS, , PH, PL, , TZ, UA, , MZ, SD, , FR, GB,	DE, DK, HR, HU, LT, LU, PT, RO, UG, UZ, SL, SZ, GR, IE,	DK, DM, ID, IL, LV, MA, RU, SD, VN, YU, TZ, UG, IT, LU,	DZ, IN, MD, SE, ZA, ZM, MC,	EC, IS, MG, SG, ZM, ZW, NL,	EE, JP, MK, SI, ZW, AT, PT,	EE, KE, MN, SK, AM, BE, SE,	ES, KG, MW, SK, AZ, CH, TR,
AU 2002 EP 1343	BF, BJ, CF 039547 783	A5	20020618	AU 2	002-3954	7		2	0011	206
R: EE 2003	AT, BE, CH, IE, SI, LT, 00273 002453 LN. INFO.:	DE, DK, LV, FI A A	, ES, FR, , RO, MK, 20040216 20030716	GB, GR, CY, AL, EE 2 NO 2 US 2 WO 2	IT, LI, TR 003-273	LU, 28P	NL,	SE, 20 20 20	MC, 0011: 0030: 0001:	PT, 206 528 208

AB The title compds. [I; X = alkylene, alkenylene; Y = CO, CS, SO2; Z = a bond, O, S, NR5; R1 = (un)substituted aryl, heteroaryl, heterocyclyl, etc.; R2 = H, alkyl, alkenyl, etc.; R3, R4 = alkyl, alkenyl, halo, etc.;

R5 = H, alkyl] that contain substituted amine functionality at the 1-position, and are useful as immune response modifiers, were prepared E.g., a multi-step synthesis of I [X = (CH2)4; Y = CO; Z = a bond; R1 = Ph; R2 = Bu; R3, R4 = Me; R5 = H] which showed lowest effective concentration

of

CN

 $0.12~\mu\text{M}$ and $1.11~\mu\text{M}$ to induce interferon α and TNF α , resp., was given. The compds. I can induce the biosynthesis of various cytokines and are useful in the treatment of a variety of conditions including viral diseases and neoplastic diseases.

IT 437384-44-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of substituted imidazopyridines as immune response modifiers)

RN 437384-44-6 CAPLUS

Urea, N-[4-(4-amino-2-butyl-6,7-dimethyl-1H-imidazo[4,5-c]pyridin-1-yl)butyl]-N'-phenyl- (9CI) (CA INDEX NAME)

=> d his

L1

(FILE 'HOME' ENTERED AT 10:52:10 ON 19 AUG 2004)

FILE 'REGISTRY' ENTERED AT 10:52:31 ON 19 AUG 2004

STRUCTURE UPLOADED

L2 5 S L1

L3 43 S L1 FULL

FILE 'CAPLUS' ENTERED AT 10:53:03 ON 19 AUG 2004

L4 4 S L3

=> d 11

L1 HAS NO ANSWERS

L1 STR

10/771,639

- G1 O,S
- G2 H,Me
- G3 Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

=>



PALM INTRANET

Day: Thursday Date: 8/19/2004 Time: 09:19:01

Inventor Name Search Result

Your Search was:

Last Name = HEPPNER First Name = PHILIP

Application#	Patent#	Status	Date Filed	Title	Inventor Name 40
<u>60581317</u>	Not Issued	020	06/18/2004	ARYL SUBSTITUTED IMIDAZONAPHTHYRIDINES	HEPPNER, PHILIP D.
60581297	Not Issued	018	06/18/2004	ARYLOXY AND ARYLALKYLENEOXY SUBSTITUTED THIAZOLOQUINOLINES AND THIAZOLONAPHTHYRIDINES	HEPPNER, PHILIP D.
60581205	Not Issued	020	06/18/2004	ARYL AND ARYLALKYENYL SUBSTITUTED THIAZOLOQUINOLINES AND THIAZOLONAPHTHYRIDINES	HEPPNER, PHILIP D.
60579352	Not Issued	020	06/14/2004	UREA SUBSTITUTED IMIDAZOPYRIDINES, IMIDAZOQUINOLINES, AND IMIDAZONAPHTHYRIDINES	HEPPNER, PHILIP D.
60554680	Not Issued	020	03/19/2004	PYRAZOLOPYRIDINES AND ANALOGS THEREOF	HEPPNER, PHILIP D.
60516331	Not Issued	020	10/31/2003	ARYL SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
60508634	Not Issued	020	10/03/2003	ALKOXY SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
60254218	Not Issued	159	12/08/2000	ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10824232	Not Issued	020	04/14/2004	IMIDAZONAPHTHYRIDINES	HEPPNER, PHILIP D.
10772170	Not Issued	020	02/04/2004	AMIDE SUBSTITUTED IMIDAZOPYRIDINES	HEPPNER, PHILIP D.
10771639	Not Issued	030	02/04/2004	UREA SUBSTITUTED IMIDAZOPYRIDINES	HEPPNER, PHILIP D.
<u>10754056</u>	Not Issued	041	:	SULFONAMIDO SUBSTITUTED IMIDAZOPYRIDINES	HEPPNER, PHILIP D.

10696753	Not Issued	071	10/29/2003	ARYL ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10696478	Not Issued	041	10/29/2003	SULFONAMIDO ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
<u>10696476</u>	Not Issued	020	10/29/2003	SULFONAMIDO ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10696108	Not Issued	041	10/29/2003	ARYL ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
<u>10681814</u>	Not Issued	041	10/07/2003	UREA SUBSTITUTED IMIDAZOQUINOLINE ETHERS	HEPPNER, PHILIP D.
<u>10681711</u>	Not Issued	041	10/07/2003	AMIDO ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
<u>10681457</u>	Not Issued	030	10/07/2003	AMIDO ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10680989	Not Issued	041	10/07/2003	UREA SUBSTITUTED IMIDAZOQUINOLINE ETHERS	HEPPNER, PHILIP D.
10675833	Not Issued	041	09/30/2003	HETEROCYCLIC ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10456308	Not Issued	094	06/06/2003	ETHER SUBSTITUTED IMIDAZOPYRIDINES	HEPPNER, PHILIP D.
10406181	Not Issued	094	04/03/2003	IMIDAZONAPHTHYRIDINES	HEPPNER, PHILIP D.
10358017	6720334	150	02/04/2003	UREA SUBSTITUTED IMIDAZOPYRIDINES	HEPPNER, PHILIP D.
10357995	6720333	150	02/04/2003	AMIDE SUBSTITUTED IMIDAZOPYRIDINES	HEPPNER, PHILIP D.
10322262	6696465	150	12/17/2002	SULFONAMIDO SUBSTITUTED IMIDAZOPYRIDINES	HEPPNER, PHILIP D.
10165750	6677348	150	06/07/2002	ARYL ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10165453	6545017	150	06/07/2002	UREA SUBSTITUTED IMIDAZOPYRIDINES	HEPPNER, PHILIP D.
10165449	6664265	150	06/07/2002	AMIDO ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10165443	6677347	150	06/07/2002	SULFONAMIDO ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10165229	6545016	150	06/07/2002	AMIDE SUBSTITUTED IMIDAZOPYRIDINES	HEPPNER, PHILIP D.
10165002	6525064	150	06/07/2002	SULFONAMIDO SUBSTITUTED	HEPPNER,

				IMIDAZOPYRIDINES	PHILIP D.
<u>10164816</u>	6660735	150	06/07/2002	UREA SUBSTITUTED IMIDAZOQUINOLINE ETHERS	HEPPNER, PHILIP D.
10013202	6670372	150	12/06/2001	ARYL ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10013060	6656938	150	12/06/2001	UREA SUBSTITUTED IMIDAZOQUINOLINE ETHERS	HEPPNER, PHILIP D.
10012599	6683088	150	12/06/2001	SULFONAMIDO ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
10011921	6664260	150	12/06/2001	HETEROCYCLIC ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
<u>10011670</u>	6660747	150	12/06/2001	AMIDO ETHER SUBSTITUTED IMIDAZOQUINOLINES	HEPPNER, PHILIP D.
09706990	6514985	150	11/06/2000	IMIDAZONAPHTHYRIDINES	HEPPNER, PHILIP D.
09210114	6194425	150	12/11/1998	IMIDAZONAPHTHYRIDINES	HEPPNER , PHILIP D.

Inventor Search Completed: No Records to Display.

	Last Name	First Name
Search Another:	Heppner	Philip
Inventor		Search

To go back use Back button on your browser toolbar.

Back to PALM | ASSIGNMENT | OASIS | Home page